

Listing of Claims:

1. (Previously Presented) A method for forming an interposer substrate, comprising:
providing a rectangular, substantially planar substrate comprising a dielectric material and having a longitudinal axis; and
forming an elongated multisegmented interconnect slot in the substantially planar substrate having a longitudinal axis positioned approximately collinear to the longitudinal axis of the substantially planar substrate comprising:
sizing, configuring and positioning a first segment of the elongated multisegmented interconnect slot and at least a second segment of the elongated multisegmented interconnect slot for respective alignment with a first plurality of bond pads and at least a second plurality of bond pads on a single semiconductor die to be placed on the substantially planar substrate to enable respective access to the first plurality of bond pads and the at least a second plurality of bond pads through the first segment of the elongated multisegmented interconnect slot and the at least a second segment of the elongated multisegmented interconnect slot; and
wherein sizing, configuring and positioning the first segment of the elongated multisegmented interconnect slot and the at least a second segment of the elongated multisegmented interconnect slot further comprises removing at least a portion of the dielectric material from the substrate along the longitudinal axis of the substrate and positioning at least one crosspiece substantially transverse to the longitudinal axis of the substrate to form a first segment of the elongated multisegmented interconnect slot and at least a second segment of the elongated multisegmented interconnect slot separated by the at least one crosspiece.

2. (Previously Presented) The method of claim 1, further comprising forming the elongated multisegmented interconnect slot by milling through the substrate and positioning the at least one crosspiece comprising leaving at least one unmilled portion of the substrate lying intermediate opposing, distal ends of the first segment of the elongated multisegmented interconnect slot and the at least a second segment of the elongated multisegmented interconnect slot.

3. (Previously Presented) The method of claim 2, further comprising producing filleted side edges on the at least one crosspiece during the milling.

4. (Withdrawn) The method of claim 1, wherein forming the elongated multisegmented interconnect slot comprises forming a unitary elongated interconnect slot and positioning the at least one transversely extending crosspiece by bonding a segment of material transversely across the unitary interconnect slot at a location intermediate opposing ends thereof.

5. (Withdrawn) The method of claim 4, wherein positioning the at least one crosspiece comprises forming a tape segment coated with an adhesive on opposing sides thereof and adhering the tape segment to a surface of the substantially planar substrate.

6. (Withdrawn) The method of claim 1, wherein forming the elongated multisegmented interconnect slot comprises forming a unitary elongated interconnect slot, forming an "I"-shaped segment of material and bonding a head portion of the "I"-shaped segment to the substrate on one side of the unitary interconnect slot and a foot portion of the "I"-shaped segment to the substrate on an opposing side of the unitary interconnect slot with a body portion of the "I"-shaped segment extending transversely thereacross to form the at least one crosspiece.

7. (Withdrawn) The method of claim 6, further comprising forming the "I"-shaped segment as a film having an adhesive coating on opposing sides thereof.

8. (Withdrawn) The method of claim 6, further comprising forming the “T”-shaped segment as a substantially rigid plastic segment.

9. (Withdrawn) The method of claim 1, wherein forming the elongated multisegmented interconnect slot comprises forming a unitary elongated interconnect slot, forming a “T”-shaped element having a body and a cap, extending the body into the unitary interconnect slot in contact with opposing sides thereof and bonding legs of the cap extending transversely to the unitary interconnect slot over a surface of the substrate thereto to form the at least one crosspiece.

10. (Withdrawn) The method of claim 1, wherein forming the elongated multisegmented interconnect slot comprises forming a unitary elongated interconnect slot, forming a tape segment of a polymeric material containing a reinforcement material, positioning the tape segment transversely across the unitary interconnect slot and bonding the tape segment to a surface of the substrate.

11. (Withdrawn) The method of claim 1, wherein forming the elongated multisegmented interconnect slot comprises forming a unitary elongated interconnect slot, interposing a bar of material transversely between opposing sides of the unitary interconnect slot and bonding the bar thereto.

12. (Previously Presented) The method of claim 1, further comprising forming the elongated multisegmented interconnect slot to a total length of about 67% or more of a length of the substrate.

13. (Previously Presented) The method of claim 12, further comprising forming the elongated multisegmented interconnect slot to a total length of about 70 to 80% of a length of the substrate.

14. (Previously Presented) The method of claim 1, further comprising positioning the at least one crosspiece substantially at a longitudinal midpoint of a total length of the elongated multisegmented interconnect slot.

15. (Previously Presented) A method for forming an interposer substrate, comprising: providing a rectangular, substantially planar substrate comprising a dielectric material and having a longitudinal axis; and forming an elongated multisegmented interconnect slot in the substantially planar substrate and a plurality of crosspieces, comprising:

sizing, configuring and positioning each of a plurality of segments of the elongated multisegmented slot for respective alignment with a plurality of bond pads on a single semiconductor die to be placed on the substantially planar substrate to enable access to each plurality of bond pads through one of the plurality of segments of the elongated multisegmented interconnect slot; and

wherein sizing, configuring and positioning each of the plurality of segments of the multisegmented slot further comprises removing at least a portion of the dielectric material from the substrate along the longitudinal axis of the substrate and positioning the plurality of crosspieces substantially transverse to the longitudinal axis of the substrate to form the plurality of segments of the elongated multisegmented interconnect slot and to separate each segment of the plurality of segments from another segment of the plurality of segments.

16. (Previously Presented) The method of claim 15, further comprising forming the elongated multisegmented interconnect slot by milling approximately the same distance through the substrate to form each of the plurality of segments of the elongated multisegmented interconnect slot and positioning the plurality of crosspieces by leaving a plurality of unmilled portions of the substrate.

17. (Previously Presented) The method of claim 16, further comprising producing filleted side edges on the plurality of crosspieces during the milling.

18. (Previously Presented) The method of claim 15, further comprising forming the plurality of segments of the elongated multisegmented interconnect slot to a combined length of about 67% or more of a length of the substrate.

19. (Previously Presented) The method of claim 18, further comprising forming the plurality of segments of the elongated multisegmented interconnect slot to a combined length of about 70 to 80% of a length of the substrate.

20. (Previously Presented) The method of claim 15, further comprising positioning each of the plurality of crosspieces approximately equidistant from at least a first longitudinally adjacent crosspiece and one of a second longitudinally adjacent crosspiece and an end of the elongated multisegmented interconnect slot.